In the Specification:

1. On page 8, after paragraph 7, add the following new paragraphs so they comprise the end of the section titled "Description of the Drawings:"

Fig. 6 shows a cross-section of a gravity switch.

Figs. 7A-7C show the arrangement with respect to a patient's body of a plane containing the superposed axes of position sensors.

Fig. 8 shows a coupling of sensors to a playback means in an embodiment of the present invention.

Fig. 9 shows a wireless transmitter and receiver as part of a first embodiment of the present invention.

Fig. 10 shows a wireless transmitter and receiver as part of a second embodiment of the present invention.

2. Replace paragraph 3 on page 13 (continues into page 14) as follows, noting that a new paragraph is being inserted:

For questions related to airway patency during sleep, body orientation information for an axial portion of the body is often useful, since the airway and surrounding structures are generally axial structures themselves. Other axial structures include, but are not restricted to the head, the neck, and the chest.

Fig. 6 shows an embodiment of a gravity sensing device including a gravity sensing switch 60. Gravity sensing switch 60 includes a housing 61 containing a cavity 62 and electrically conductive material 65a able to move

within cavity 62. Fig. 6 shows a second possible position 65b for electrically conductive material 65a. Gravity sensing switch 60 also includes a first contact point pair 63 and a second contact point pair 64. Contact point pair 64 comprises, for example, contact points 64a and 64b. When electrically conductive material 65a moves in response to an acceleration (e.g. a gravitational field) it may electrically connect a pair of contact points, e.g. contact points 64a and 64b as shown for position 65b in Fig. 6. With appropriate circuit design, known to those of ordinary skill in the art, a contact point pair connected by electrically conductive material 65a may produce a signal different from other contact point pairs connected by electrically conductive material 65a. In such a way a plurality of gravity sensing switches may provide information indicative of orientation with respect to a gravitational field.

In ~~a preferred~~ an embodiment, the gravity sensing devices 18 and 20 are tilt switches containing liquid mercury which connects contacts at one end or the other depending upon the orientation of the devices with respect to gravity, or accelerometers, as these seem to be an inexpensive, simple, and reliable means of implementation. It is also possible to use a single accelerometer chip that detects acceleration in one or more axes. However, as shown in the background art, there are other gravity sensing devices that will work, such as a polyhedron with an internal ball that makes contact in the various corners of the device as it changes position with respect to gravity. In some embodiments liquid mercury may be used instead of an internal ball, and vice versa. Other internal architectures of gravity-sensing devices are also possible, such as using a tethered mobile element.

3. On page 14, replace paragraph 3 as follows (note that the paragraph continues onto page 15):

However, it is often more informative if position sensor 16 can determine which of at least four positions it, and thus the patient, is in. In ~~a preferred~~ an embodiment, these four positions are when the patient is on his or her back, front, left side or right side, also known as the supine, prone, left lateral decubitus, and right lateral decubitus positions, respectively. (An alternative that may satisfy some needs may be a sensor that can determine three positions, i.e. whether the patient is on his or her back, front, or either side.) ~~This~~ Merely by example, determination of four positions can be accomplished with gravity sensing devices arranged as shown in Fig. 2, wherein the states of gravity sensing devices 18 and 20 are shown for four different positions. Figs. 1 and 2 show two gravity sensing devices 18 and 20, angled to each other. [[,]] ~~and with~~ Figs. 7A-C show a plane 75 containing the superposition of the respective axes 72 and 73 of sensitivity of gravity sensing devices 18 and 20 oriented at an angle to an ~~the~~ axial portion 70 of the patient's body 71. Right angles 74 between the axes of sensitivity of gravity sensing devices 18 and 20, and right angles 76 and 77 between the plane containing the superposition of those axes and the axis of the axial portion of the patient's body normally give the greatest theoretical sensitivity. However, other angles will work as long as they are sufficient to let the position sensor 16 (or a device receiving information from position sensor 16) determine which of four (or three if desired) positions sensor 16 is in, and to correlate those positions to the positions of the patient's body.

4. On page 17, replace paragraph 2 (continues into page 18) as follows, noting that a paragraph break has been inserted:

As described above, the position sensor 16 can be completely contained within housing 12. It is also possible that some portion of position sensor 16 can be located outside the housing, for example in a cable attached to the housing.

In ~~a preferred~~ an embodiment, there is an indicator on ~~the~~ housing 12 that shows the patient the direction in which ~~the~~ housing 12 is to be oriented when ~~he or she~~ the patient attaches it to himself or herself. ~~Also in a preferred~~ In an embodiment[[,]] this indicator is a protrusion from the housing that is to be oriented so as to point ~~pointed~~ down the patient's body from the pre-tracheal location when the housing 12 is attached to the body. ~~The~~ As in Fig. 4, indicator 23 may also be one or more labels, icons (e.g. feet icons to show the inferior direction, and head or eye icons to show the superior direction), arrows or other marks on the housing. [[,]] ~~but~~ However, a protrusion ~~is preferred~~ has advantages since the patient may not be able to see the pre-tracheal location well unless he or she is looking in a mirror when the housing is attached. The indicator may fulfill a plurality of functions, e.g. a ridge on the housing could serve as an indicator and as a means to facilitate gripping of the housing. The indicator could alternatively or additionally be a color or texture or shape property of a portion of the housing. The shape, coloring, texture, or other property(s) of an object coupled to the housing, e.g. the adhesive, could be used to indicate proper placement and/or orientation of the housing 12.

5. On page 22, between paragraphs 2 and 3, add the following three new paragraphs:

Fig. 8 shows an embodiment of aspects of an embodiment of the invention taught above. Tracheal vibration sensor 14 and position sensor 16 are coupled to a recording means 81. Information from sensors 14 and 16 are converted into digital samples by conversion means 82. Conversion means 82 may be composed of, but is not restricted to, an A/D converter and a multiplexing means. A multiplexing means, as known to persons with ordinary skill in the art, may allow signals from a plurality of sensors to be obtained in an alternating fashion via a single A/D converter, as noted earlier. Digital information produced by conversion means 82 is written to memory 84 by writing means 83. In an embodiment, a power source 85 supplies electrical power to conversion means 82, writing means 83, and memory 84. When memory 84 is non-volatile, its power requirements may differ, e.g. it may not require power after data are written to it. A computing device 86, e.g. a programmable processing unit, may orchestrate various functions, including, but not restricted to, conversion of signals into digital form (possibly including multiplexing), retrieval of digital information stored in memory 84, computations on retrieved digital information (e.g. transforms of the retrieved digital information), communication of digital information, and audio playback of information (e.g. via playback means 87).

Fig. 9 shows a wireless data transmission capability as part of an embodiment of the present invention. The output(s) 92 of one or more sensors 91, e.g. tracheal vibration sensor or position sensor, is (are) coupled to a transmitter 94 that is wirelessly coupled to a receiver 96. Receiver 96 is coupled to the input 98 of a conversion means 99. Thus, it is possible to couple one or more sensors 91 to a conversion means 99 without a physical connection between them.

Fig. 10 shows a wireless data transmission capability as part of another embodiment of the present invention. The output 102 of a conversion means 101 is coupled to a transmitter 104 that is wirelessly coupled to a receiver 106. Receiver 106 is coupled to the input 108 of memory 109. Input 108 of memory 109 may be, for example, a writing means 83 as shown in Fig. 8. Thus, it is possible to couple a conversion means 101 to a memory 109 without a physical connection between them.